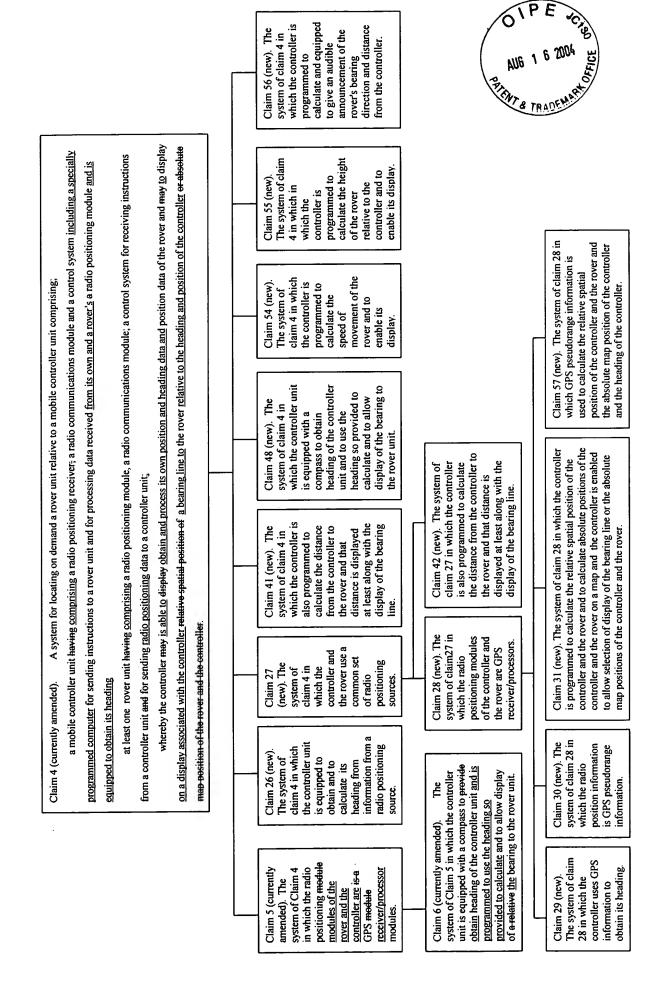
controller as center bearing to the rover relative to the controller's heading and position and is programmed to calculate absolute positions of the controller and the rover on a map whereupon the selected one of the relative information from the rover's radio positioning GPS receiver/processor module and, using the controller unit's position information from its GPS receiver/processor, to calculate the relative spatial position of the controller spatial positions a bearing line to the rover relative to the controller's heading and position or the absolute map positions of the controller and the rover are available to be displayed on the display upon selection by the user the mobile controller unit being programmed to have a find feature which includes selection of a command to establish a radio communication link with the rover and to obtain the rover's positio and the rover in a suitable ecordinate system and the controller unit being further equipped to obtain its heading and programmed to use the heading to calculate upon command the relative spatial position having the calculate and equipped which the controller is direction and distance Claim 53 (new). The announcement of the C/30 system of claim 1 in from the controller. to give an audible programmed to rover's bearing AU6 1 6 2004 TRADEMARY. The system of claim to enable its display. I in which in which calculate the height of the rover relative to the controller and the controller is Claim 52 (new). programmed to of movement of the calculate the speed rover and to enable A system for locating and tracking at least one rover unit from a mobile controller unit comprising: claim 1 in which the controller is Claim 51 (new) programmed to The system of its display. from the controller to the rover and that distance is displayed at least along which the controller is with the display of the calculate the distance Claim 39 (new). The system of claim 1 in also programmed to displayed at least along with the is also programmed to calculate to the rover and that distance is Claim 40 (new). The system of claim 2 in which the controller the distance from the controller bearing line display of the bearing line. information to controller unit (new) The claim 1 in which the system of uses GPS obtain its Claim 23 heading. a specially programmed computer; a specially programmed computer; a GPS receiver/processor module; a GPS receiver/processor module; Claim 25 (new) The system of claim 2 absolute map position of the controlle a cellular telephone module; a cellular telephone module; information is used to calculate the and the heading of the controller. a mobile controller unit comprising; The systems system of Claim 1 controller and the rover and the in which the controller unit is calculate and to allow display provide obtain heading of the controller unit and to use the relative spatial position of the Claim 3 (currently amended) equipped with a compass to of relative the bearing to the in which GPS pseudorange heading so provided to a power source; a power source; a rover unit comprising; a display; Claim 1 (currently amended). rover unit. the rover unit use a claim 2 in which the radio position information is GF commonly tracked System of Claim 1 controller unit and Claim 2 (currently Claim 24 (new) common suite of The system of pseudorange amended). The information. GPS satellites. in which the



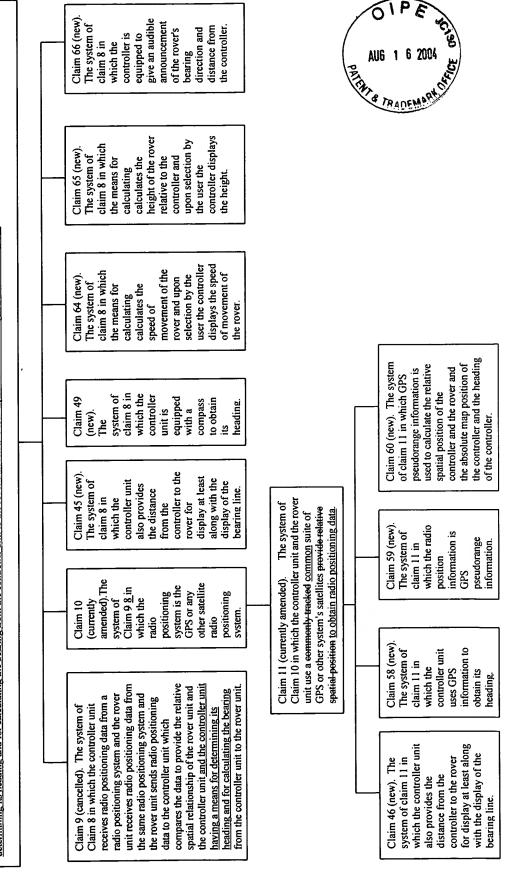
AUG 1 6 2004 Claim 63 (new). The system controller is programmed to announcement of the rover's distance from the controller. calculate and equipped to obtain the rover's position information from the rover's radio positioning module in a suitable coordinate system and the controller unit being further equipped to obtain its heading and programmed of claim 7 in which the to use the heading to calculate upon command the relative spatial position having the controller as center bearing to the rover relative to the controller's heading and position and programmed to the mobile controller unit being programmed to have a find feature which includes selection of a command to establish a radio communication link with the rover and to bearing direction and calculate absolute positions of the controller and the rover on a map whereupon the selected one of a bearing line to the rover relative to the controller's heading and position the relative spatial give an audible programmed to calculate the height of the rover and to enable its display. relative to the controller Claim 62 (new). The system of claim 7 in which in which the controller is positions or the absolute map positions of the controller and the rover are available to be displayed on the display upon selection by the user A system for locating and tracking at least one rover unit from a mobile controller unit comprising: Claim 61 (new). The system of claim 7 in which the controller of movement of the rover and to enable is programmed to calculate the speed its display. which the controller is programmed to calculate the relative spatial position of the controller and the rover and to calculate absolute positions of the controller and the rover on a map and the display of the bearing line or the absolute map least along with the display of controller is also programmed the controller to the rover and that distance is displayed at to calculate the distance from Claim 38 (new). The system of claim 35 in Claim 43 (new). The system controller is enabled to allow selection of positions of the controller and the rover. of claim 7 in which the the bearing line. distance is displayed at least along with from the controller to the rover and that Claim 44 (new). The system of claim programmed to calculate the distance a specially programmed computer; 33 in which the controller is also a specially programmed computer, a radio communications module; a radio communications module; the display of the bearing line. a radio positioning module; a radio positioning module; unit and is programmed to use the to obtain heading of the controller a mobile controller unit comprising; heading so provided to calculate unit is equipped with a compass Claim 34 (new). The system of Claim 7 in which the controller and to allow display of the bearing to the rover unit. a power source; a power source: a rover unit comprising; GPS pseudorange claim 35 in which a display; the radio position Claim 37 (new). information is The system of information. Claim 7 (currently amended). which the radio positioning modules of the controller and the rover are GPS system of claim 33 in Claim 35 (new). The receiver/processors. GPS information the controller and radio positioning claim 7 in which Claim 33 (new) Claim 36 (new) common set of the rover use a The system of controller uses The system of to obtain its claim 35 in which the heading. sonnces

a mobile controller unit having a radio positioning module and a radio communications module and a control system for sending instructions directly to a rover unit and for processing data received A system for locating on demand a rover unit relative to a mobile controller unit comprising, directly from a radio positioning module; Claim 8 (currently amended).

controller unit whereby upon selection by a user the controller may display position data of the rover and may make available for display a bearing line from the controller to the rover relative spatial position at least one rover unit having a radio positioning module, a radio communications module, a control system for receiving instructions from a controller unit and for sending data directly to a

the radio communications module and control system of the mobile controller having direct communications with the control system of the same unit such that radio data sent by the rover unit is of the rover or absolute map position of the rover and the controller; received directly by the mobile controller unit;

whereby the controller unit receives radio positioning data from a radio positioning system and the rover unit receives radio positioning data from the same radio positioning system and the rover unit sends radio positioning data to the controller unit which compares the data to provide the relative spatial relationship of the rover unit and the controller unit and the controller unit which having a means for determining its heading and for calculating the bearing from the controller unit to the rover unit relative to the position and heading of the controller unit.



displaying a bearing line from the controller unit to the rover unit relative to the position and heading of the controller unit the relative spatial position in a display associated and each have a radio positioning receiver capable of providing it's radio position information, and the rover has a means for sending radio position information to the controller unit upon demand comprising; A method for locating a rover unit from a mobile controller unit in which the rover unit and the controller unit have cellular telephones capable of intra-communication of data comparing the rover's radio position information with the controller's radio position information to calculate relative spatial position quantities of the controller and the rover unit; determining the heading of the controller unit and calculating the bearing from the controller unit to the rover unit relative to the position and heading of the controller unit; starting a procedure in which the rover's radio position information is sent to the controller; opening a cellular telephone link between the controller and the rover; Claim 12 (currently amended). with the mobile controller unit.

claim 12 further Claim 50 (new) The method of heading of the controller unit wherein the is obtained compass from a of claim 12 further comprising making display of the distance determining the distance from the controller to the rover and Claim 47 (new). The method available either automatically with display of the bearing line, or upon selection by a user. position signals from a method of claim 12 in positioning receivers Claim 14 (currently positioning system. track receive radio which the radio amended). The satellite radio and the radio position information is GPS method of claim 12 in which the radio positioning receivers are GPS receivers position and bearing are is determined using the information from commonly tracked a common suite of satellites information and the relative spatial Claim 13 (currently amended). pseudorange and carrier phase

speed of movement claim 12 further of the rover and Claim 72 (new) The method of calculating the enabling its comprising display.

enabling its display. height of the rover claim 12 further Claim 73 (new) calculating the The method of relative to the controller and comprising

Claim 74 (new). The announcement of the method of claim 12 further comprising giving an audible distance from the rover's bearing direction and controller.

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claim 14 in which radio positioning the rover and the Claim 67 (new) controller use a common set of The method of sources. displaying a relative bearing of the rover The method of compass to obtain the heading of the direction to the controller unit and unit to the controller unit using a providing a compass claim 13 further comprising; Claim 15 (original). controller unit. Claim 68 (new). The method of claim 67 in which the satellite radio positioning system is the GPS and the rover and the controller use a common suite of GPS satellites for GPS radio position information.

the controller uses claim 68 in which GPS information Claim 70 (new) The method of to obtain its heading. position information is GPS pseudorange claim 68 in which Claim 69 (new) The method of the GPS radio information.

the heading of the claim 68 in which obtained from a Claim 71 (new) The method of controller is compass.



Claim 16 (currently amended). A method for locating a rover unit from a mobile controller unit in which the rover unit and the controller unit have radio communication capability between them such that the controller unit may upon query obtain information from the rover unit and each of the controller unit and the rover unit has a radio positioning module for obtaining radio positioning information such that radio position information of the rover unit will upon query be sent to the mobile controller unit and in which the mobile controller unit can process the radio position information to provide relative spatial relationship of the mobile control unit to the rover unit with periodic updates and displaying the relative spatial relationship on one or more displays associated with the mobile controller and the controller unit has a means for obtaining its heading, the method comprising;

the rover unit and the controller unit obtaining radio positioning information

the rover unit sending its radio positioning information to the controller unit;

the controller unit calculating the relative spatial position of the rover unit and the controller unit and the controller unit calculating its heading and the bearing from the controller unit to the rover unit relative to the position and heading of the controller unit and displaying a bearing line from the controller unit to the rover unit relative to the position and heading of the controller unit.



position information to provide relative spatial relationship of the mobile controller unit to the rover unit with positioning module for obtaining radio positioning information such that radio position information of the rover unit may upon query obtain information from the rover unit and each of the controller unit and the rover unit has a radio will upon query be sent to the mobile controller unit and in which the mobile controller unit can process the radio rover unit and the controller unit have radio communication capability between them such that the controller unit A method for locating a rover unit from a mobile controller unit in which the periodic updates, and the controller unit has a means to obtain its heading comprising. Claim 17 (currently amended).

determining the bearing from the mobile controller unit to the rover unit relative to the heading and position of the mobile controller unit;

and displaying on one or more displays associated with the mobile controller as selected by the user; an arrow showing the a bearing line showing direction of the location of the rover unit

relative to the position and heading of the mobile controller unit;

a map showing the location of both the mobile controller unit and the rover unit;

identification data representing the rover unit.

Claim 19 (currently amended) The method of Claim 17 further comprising;

compass to the controller unit controller unit relative to the position and heading of the to enable displaying of the relative bearing to of the providing a rover unit from to the controller unit.

geographical coordinates of the rover unit.

Claim 18 (currently amended). The method of Claim 17 the distance of the rover unit to the mobile the speed of movement of the rover unit; further displaying one or more of the following;

rover unit and trail indicia showing display a history of the location of the rover unit over a specified period of a map display showing the location of the mobile controller unit;

the altitude of the rover unit relative to the

controller unit;



A method of finding a rover unit by use of a mobile Claim 20 (currently amended).

controller unit comprising;

sending a query to the rover unit by signal from a radio communication module in the mobile controller unit to a radio communication module in the rover unit;

information obtained from a radio positioning module in the rover unit and sent to the mobile responding to the query, from the rover unit with radio positioning controller unit by way of the radio communication modules in each unit;

the rover unit continuing to respond periodically with new radio

positioning information;

positioning module to determine relative spatial position and absolute map position of the rover unit; unit with radio positioning information received by the mobile controller unit by its own radio comparing the radio position information sent to the mobile controller

obtaining heading of the mobile controller unit;

displaying on one or more displays;

an arrow showing the bearing line direction of the location of the rover unit relative to the position and heading of the mobile controller unit;

the speed of movement of the rover unit relative to the controller unit;

a map display showing the location of the rover unit and of the

controller unit

The method of Claim 20 further comprising; Claim 21 (original).

providing by an optional selection;

on said map display showing the location of the rover unit also showing a series of indicia showing a history of the location of the rover unit.

The method of Claim 21 wherein the radio positioning modules are GPS modules and the rover unit and controller unit use information from a common suite of GPS commonly tracked satellites to provide relative spatial positions. Claim 22 (currently amended).



Claim 32 (new). A system for locating and tracking at least one rover unit from a mobile controller unit comprising

a mobile controller unit comprising;
a radio position receiver/processor module;

a display;

a rover unit comprising;

a radio position receiver/processor module;

a specially programmed computer that is enabled to obtain and use radio positioning information for the rover and the controller from their respective radio position receiver/processors and heading information for the controller and to calculate the bearing of the rover from the controller relative to the controller's heading and position and to display on the display a bearing line from the controller to the rover relative to the controller's heading and position.

claim 75 further using the radio position information of the rover unit and the mobile controller unit and the heading of the mobile controller unit calculating with a specially programmed computer Claim 84 (new) The method of announcement controller unit distance from unit's bearing providing an direction and comprising of the rover the mobile AUG 1 6 2004 AUD 1 D ZUIA audible mobile controller and enabling its claim 75 further rover relative to calculating in a Claim 83 (new) The method of display on the the controller computer the height of the programmed comprising specially unit. displaying a bearing line from the mobile controller unit to the rover unit relative to the heading and position of the mobile controller unit. mobile controller movement of the claim 75 further calculating in a Claim 82 (new) The method of rover unit and display on the computer the programmed enabling its comprising specially speed of unit. (new). The method of comprising the heading unit from a obtaining controller claim 75 Claim 81 compass further mobile of the calculating the controller unit distance from display of the (new). The to the rover the mobile comprising method of Claim 80 enabling claim 75 unit and distance. the mobile controller unit obtaining its radio position information and its heading; further of claim 85 further comprising Claim 88 (new). The method calculating the distance from the mobile controller unit to the rover unit and enabling the bearing of the rover unit relative to the heading and position of the mobile controller unit; and positioning information, Claim 75 (new). A method for locating a rover unit from a mobile controller unit comprising; display of the distance. using the GPS radio claim 75 further form a common Claim 79 (new) obtaining radio The method of comprising the controller unit and the rover set of radio positioning information positioning sources. mobile the rover obtaining its radio position information. Claim 78 (new). The the heading comprising positioning unit from a method of obtaining claim 85 wherein controller claim 75 the controller is Further mobile Claim 87 (new) The method of source. the heading of of the radio obtained by using GPS signals. claim 75 further and of the rover Claim 77 (new) The method of from a satellite information of controller unit obtaining the comprising positioning the mobile system. radio method of claim 76 wherein is obtained from a common unit and the controller unit information of the rover information is GPS the GPS radio position suite of GPS satellites. the radio position Claim 85 (new). The claim 85 wherein Claim 86 (new) The method of pseudorange information. comprising obtaining GPS information of rover from the controller unit Claim 76 (new). The positioning the mobile and of the method of claim 75 further radio

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